

Patent Abstracts of Japan

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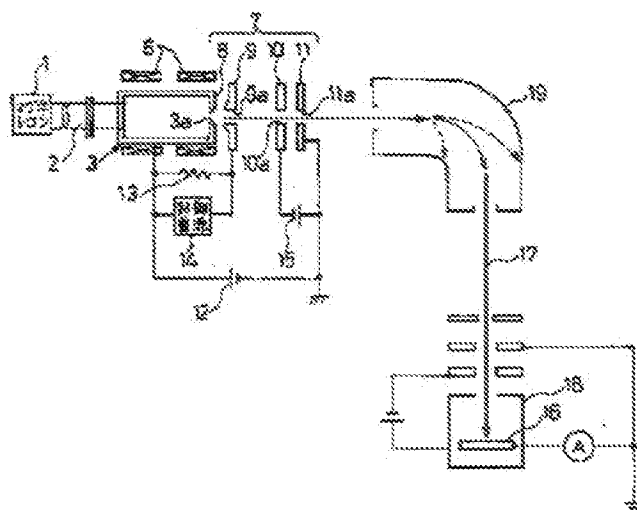
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TITLE : ION SOURCE



ABSTRACT : PURPOSE: To improve the reliability at the time of control by eliminating the flow-in of a large quantity of ions, of which polarity is opposite to that of the electron and control voltage, into a control power source.

CONSTITUTION: An ion source, which has an extraction electrode system 7 for drawing the ion among the plasma generated inside of a plasma chamber 3 from the ion emitting surface to the outside through a slit 3a of an extraction slit part 8, controls the beam quantity of the ion beam at a predetermined value. The ion source has a control electrode 9 for making a desired control voltage exist outside of the slit 3a of the extraction slit part 8, and a control power source 14, and a debye length control means for positioning the ion emitting surface of the plasma inside of the plasma chamber 3. With this structure, since the ion emitting surface is positioned inside of the plasma chamber 3, the influence of the extraction electrode 10 to the ion and the electron become large together with the influence of the control voltage.

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